

Systematic notes on Tettigoniidae of Korea

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Abstract Thirty two species of Tettigoniidae have been previously reported in Korea, of which the names of 13 species are junior synonyms. A total of 26 species is confirmed and reclassified after surveying the literatures including their first records and descriptions in Korea. *Metrioptera koreana* Mori, *Paratantius pal-gongensis* Rentz et Miller, and *Tettigonia dolicoptera* Mori are placed as new synonyms.

Key words systematics, Orthoptera, Tettigoniidae, Korea

INTRODUCTION

Tettigoniidae is one of the moderate-sized group belonging to the superfamily Tettigoniioidea of the suborder Ensifera. The family comprises 28 species in Korea and about 380 species in Palaearctic region.

The first record on Tettigoniidae from Korea was by Walker (1869) who listed four Korean species, *Decticus tenebrosus* Walker (syn. of *Mecopoda elongata* Linnaeus), *Tedla sellata* Walker (syn. of *Hexacentrus unicolor* Serville), *Xiphidium exemptum* Walker and *Dectico buergeri* De Haan in his catalogue of Dermaptera.

In 1923, Uvarov recorded *T. viridissima* (Linnaeus) from Seoul in his study of B. M. collection and he added *Kuwayamaea sapporensis* Matsumura (syn. of *Ducetia chinensis* Brunner) from Jeju Island, S. Korea (1926) and *Metrioptera brachyptera* (Linnaeus) from Mt. Baegdu, N. Korea. (1931) in his further study for the Far Eastern fauna.

Furukawa (1930) cited three species, *Metrioptera bonneti* (Bolivar), *Tettigonia viridissima* (Linnaeus) and *Gampsocleis sedakovi obscurus* Walker (syn. of *G. buergeri*) to be distributed in Korea, but it was confirmed that *viridissima* was a misidentification of *Tettigonia cantans* (Fuessly) and *obscurus* had been already reported by Walker (1869).

Bey-Bienko (1931) reported two Korean species, *Metrioptera ussuriensis* Uvarov and *Paratlanticus ussuriensis* (Uvarov) from Mt. Baegdu, N. Korea in his study of Orthoptera of USSR fauna.

Okamoto (1924) reported *Gampsocleis micado* Burr and *G. buergeri* (De Haan), but the former is a synonym of the latter which was previously reported from Jeju Island, S. Korea by Walker (1869).

In 1932, Doi reported the following 10 species mostly collected in central and northern parts of the Korean Peninsula: *Phaneroptera nigroantennata* Brunner, *P. grandis* Matsumura et Shiraki, *Ducetia japonica* (Thunberg), *Homorocoryphus lineosus* Walker (syn. of *nitidulus* Scopoli), *Xiphidium*

maculatum (Le Guillou), *Xiphidium gladiatum* Redtenbacher, *Xiphidium longipenne* De Haan (syn. of *chinensis* Redtenbacher), *Xiphidium japonicum* Redtenbacher, *Xiphidium* sp. and *Hexacentrus japonicus* Karny (syn. of *unicolor* Serville), but the last 2 species had been previously recorded by Walker (1869). Two years later, he added *Pseudorhynchus japonicus* Shiraki (syn. of *concisus* Walker) from Busan, Southern part of this country.

Mori (1933) reported 12 species which were collected throughout the Korean Peninsula and among them *Phaneroptera nakanoensis* Shiraki (syn. of *falcata* Poda), *Holochlora japonica* Burnner (syn. of *longifissa* Matsumura et Shiraki), *Callimenus onos* Pallas (syn. of *transversa* Uvarov), and *Atlantiscus brunneri* Pyllas (syn. of *chinensis* Uvarov) were reported for the first time from Korean Peninsula, and then two years later, he added *Gampsocleis ussuriensis* Adelung. Mori and Cho (1939) added *Metrioptera grisea* (misid. of *engelhardti* Uvarov) from Mt. Chail Bong, Hamgyong-buk-do, N. Korea in 1939.

Consequently, a total of 26 species of the family is revised as Korean species, but nobody has tried to track their first record from this country to date.

Cho (1959) reported 32 species in the list of Orthoptera in Korea and they were listed by Zoological Society of Korea (1968).

Among them, 2 species are newly synonymized are follows: *Metrioptera koreana* Mori is a synonym of *ussuriana* Uvarov and *Tettigonia dolichoptera* Mori is a synonym of *T. viridissima* (Linnaeus), and invalid names of species which were previously synonymized, are corrected to valid names by author. In 1971 Rentz et Miller described a new species, *Paratlanticus palgongensis* from Mt. Pal-gong, Daegu, S. Korea but it is also synonymized as a synonym of *P. ussuriensis* by author.

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SYSTEMATICS

Family Tettigoniidae Krauss, 1902

Subfamily Phaneropterinae Kirby, 1906

Genus *Phaneroptera* Servile, 1831

1. *Phaneroptera falcata* (Poda) 실베짱이

Gyrllus falcata Poda, 1761, Ins. Mus. Graes., 52 (Europe).

Phaneroptera nakanoensis Shiraki, Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 56 (Cheong-Jin, Myeong-Cheon, Na-Nam), N. Korea).

Phaneroptera falcata, Bey-Bienko, 1954, Fauna U.S.S.R., 2 (2): 52 (Korea).

Body length, 29–37 mm. One of the common species in the plain and grass land. One generation a year in August in the middle part of the country, but it seems to be bivoltine in the southern area.

Collected localities. GW: Mt. Seolag, Mt. Odae, Inje, Mt. Taebaeg; GG: Pocheon, Mt. Wangbang, Byeogje, Mt. Ungil; CB: Chupungnyeong; CN: Daejeon. JB: Jeonju. JN: Is. Jindo, Is. Wando, Is. Geomundo; GB: Mt. Palgong, Daegu; GN: Mt. Cheonhwang, Mt. Gaji, Mt. Gaya, Mt. Jiri. JJ: Is. Chujado.

Distribution. Korea, Japan (including Tsushima), Taiwan, Maritime territory, Manchuria, Siberia, Central Europe

2. *Phaneroptera nigroantennata* Brunner 검은다리실베짚이

Phaneroptera nigroantennata Brunner, 1878, Mono. Phaner.,: 215 (Japan).

Phaneroptera nigronantennata, Doi, 1932, J. Chosen Nat. Hist. Soc., 13: 37 (Mt. Baegbong, Mt. Samseong, N. Korea; Siheung, Mt. Soyo).

Phaneroptera nakanoensis 1933, J. Chosen Nat. Hist. Soc., 16: 56 (Mt. Baegdu, N. Korea), (auct. Mori, Shiraki).

Body length, 23–30 mm Hind tibia dark grey, One of the common species in low mountain areas. A generation with occurrence from August to September, in the middle part of the country, but it seems to be bevoltine in the southern part. The species *nakanoensis* Shiraki which had been reported by Mori (1933) was corrected as a misidentification of this species.

Collected localities. GW: Sogeumgang, Cheonmiri near (Chuncheon), Mt. Chiag, Inje, Mt. Taebaeg; GG: Yongin, Mt. Yongmu, Mt. Myeongji, Mt. Cheonma, Mt. Aengmubong, Songchu, Seoul; CN: Secheon, Daejeon; GB: Dae-gu, Dodong (Is. Ulleungdo); GN: Mt. Cheonhwang, Mt. Gaya, Mt. Jiri.

Distribution. Korea, Japan (Including Tsushima), E. China, Taiwan

3. *Phaneroptera grandis* Matsumura et Shiraki 큰실베짚이

Phaneroptera grandis Matsumura et Shiraki, 1908, J. Coll. Agr. Tohoku Imp. Univ., 3 (1): 23–24 (Formosa).

Phaneroptera grandis, Doi, 1932, J. Chosen Nat. Hist. Soc., 13: 37 (Mt. Baegbong, N. Korea; Mt. Soyo).

Body length, 48–54 mm. The most abundant occurrence is from July to August in Korea.

Collected localities. GW: Mt. Seolag, Mt. Odae, Mt. Bangdae, Sogeumgang, Mt. Chiag, Cheonmiri (near Chuncheon); GG: Mt. Myeongji, Mt. Yongmun, Mt. Cheonma, Mt. Bughan, Seoul, Yongin; JB: Mt. Naejang. JN: Is. Jindo; GB: Mt. Sobaeg, Mt. Hoeyang; GN: Mt. Gaya, Mt. Jiri, Mt. Ogniyobong, Is. Geojedo.

Distribution. Korea, Taiwan, Japan (only record from Is. Isigakijima)

Genus *Decetia* Stal, 1874

4. *Ducetia japonica* (Thunberg) 줄베짱이

Locusta japonica Thunberg, 1815, Mem. Acad. Imp. Petersb., 5: 282 (Japan).

Decetia japonica, Doi, 1932, J. Chosen Nat. Soc., 13: 37 (Mt. Samseong, N. Korea; Mt. Soyo, Seoul).

Ducetia thymifolia Fabricius, Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 56 (Seoul).

Body length, about 30 mm. One of the common species in low mountain areas. The main occurrence is in August–September with one generation a year in Korea.

Collected localities. GW: Sogeumgang, Chugog near chuncheon, Mt. Palbong, Chuncheon; GG: Sanjeongho, Mt. Myeongji, Mt. Aengmubong, Mt. Yongmun, Songchu, Mt. Dobong, Mt. Cheonma, Mt. Ungil, Yongin; CB: Chupungnyeong; CN: Manghyang, Yuseong, Daejeon. JB: Mt. Naejang. JN: Isl. Hongdo; GB: Dodong, Is. Ulleungdo; GN: Mt. Jiri, Mt. Gaya; JJ: Seogwipo.

Distribution. Korea, Japan (including Tsushima), Taiwan, China, Australia and in the most of tropical areas.

5. *Decutia chinensis* (Brunner) 북방실베짱이

Isotima chinensis Brunner, 1878, Mono, Phaner.,: 113 (China).

Kuwayamaea sapporensis Matsumura et Shiraki, Uvarov, 1926, Ann. Mag. Nat. Hist. 9 (17): 274 (Is. Jejudo).

Isotima japonica Matsumura et Shiraki, Nagaoka, 1938, Ent. World, 5 (46): 29 (Mt. Myohyang, N. Korea).

Ducetia chinensis, Ragge, 1961, Bull. Brit. Mus. Nat. Hist. (Ent), 10 (5): 190–191 (Is. Jejudo).

Body length 30 mm. Habitat is mostly on the grass in mountain areas. The main occurrence is in July–September, probably univoltine in Korea.

Collected localities. GW: Mt. Bangdae, Mt. Gariwang; JB: Mt. Naejang; GB: Mt. Palgong; GN: Mt. Gaya, Mt. Jiri; JJ: Mt. Halla.

Distribution. Korea, Japan, Manchuria, Ussuri.

Genus *Holochlora* Stal, 1873

6. *Holochlora longifissa* Matsumura et Shiraki. 날베짱이

Holochlora longifissa Matsumura et Shiraki, 1908, J. Coll. Agr. Tohoku Imp. Univ., 3 (1): 18–19 (Yamaguchi, Japan).

Holochlora japonica Bruner, Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 56 (Gwangju, Jeonnam).

Body length, 40–50 mm. or They mostly dwell on trees, with often flight. The main occurrence is in July–October, with univoltine in Korea. *H. japonica* has been known from Korea by Mori (1933), but the latter has not been found in Korea. All the literatures published in Japan have reported that *H. japonica* is distributed in Korean peninsula and *H. longifissa* is endemic to Japan.

Collected localities. GG: Suweon; CB: Chupungnyong; CN: Seochon, Yuseong, Daejeon; JB: Mt. Naejang; GB: Gampo; GN: Mt. Jiri.

Distribution. Korea, Japan (including Tsushima).

Subfamily Mecopodinae Kirby, 1906

Genus *Mecopoda* Serville, 1831

7. *Mecopoda elongata* (Linnaeus) 철석이

Gryllus Tettigonia elongata Linnaeus, 1758, Syst. Nat. 10: 429.

Decticus tenebrosus Walker, 1869, Cat. Derm. Salt. Brit. Mus., 2: 263 (Corea).

Mecopoda elongata, Mori, 1933, J. Chosen Nat. Hist. Soc., 15: 55 (Busan).

This species was first reported by Walker (1869) and Mori (1933), but after that, it has not been found any more in Korea.

Distribution. Korea, Japan (southern part), Oriental-tropical areas.

Subfamily Listroscelinae Kirby, 1906

Genus *Hexacentrus* Serville, 1831

8. *Hexacentrus unicolor* Serville 배짱이

Hexacentrus unicolor Serville, 1831, Ann. Soc. Nat., 22: 146.

Tedla sellata Walker, 1869, Cat. Derm. Salt. Brit. Mus., 2: 393–394 (Corea).

Hexacentrus japonicus Karny, Doi, 1932, J. Chosen nat. Hist. Soc., 13: 37 (Seoul).

Body length, 34–37 mm. Easily found on the grass in the open land. It is also attracted to the light. The main occurrence is in August, with univoltine.

Collected localities. GW: Mt. Palbong, Chuncheon; GG: Mt. Myeongji, Mt. Aengmubong, Munsan, Byeogje, Mt. Yongmun, Mt. Cheonma, Songchu, Paldang, Mt. Bughan, Geundang, Seoul; CB: Chupungnyeong; CN: Cheonmihyeob, Yuseong, Daejeon; JB: Jeonju, Igsan; JN: Is. Daeheugsando, Is. Hongo, Is. Geomundo; GN: Mt. Jiri.

Distribution. Korea, Japan (including Tsushima), Taiwan, S. E. China and other Oriental tropical areas.

Genus *Pseudorhynchus* Serville, 18399. *Pseudorhynchus concisus* Walker 여치베짱이

Conocephalus concisus Walker, 1869, Cat. Derm. Salt. Brit. Mus., 2: 322 (China).

Pseudorhynchus japonicus Shiraki, Doi, 1934, Mushi, 7(2): 124–125 (Busan).

This species was first reported with the name of *P. japonicus* by Doi (1934), but it has not been collected by author and not been found in any other collection in Korea.

Distribution. Korea, Japan, China.

Genus *Homorocoryphus* Kirby, 190710. *Homorocoryphus nitidulus* (Scopoli) 좀매부리

Gryllus nitidulus Scopoli, 1786, Delic. Flor. Faun. Insubr., 1: 62, taf. 248 (Italy).

Homorocoryphus lineosus Walker, Doi, 1932, J. Chosen Nat. Hist. Soc., 13: 37 (Sambang, N. Korea; Siheung).

Euconocephalus acuminatus Fabricius, Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 55 (Busan).

Homorocoryphus nitidulus, Doi, 1936, J. Chosen Nat. Hist. Soc., 21: 106 (Unggi, N. Korea).

Homorocorypus jezoensis Matsumura et Shiraki, Furukawa, 1950, Ico. Ins. Japan., 36 (Korea).

Body length, 40–50 mm. Large-sized individuals which are longer than 60 mm, are sometimes collected, and those have been identified as *Euconocephalus acuminatus* Fabricius. There are two colour forms; greenish and brownish form. Main habitat is grass land. The most abundant is in August, October, with univoltine in Korea.

Collected localities. GW: Mt. Seolag, Sogeumgang, Mt. Taebaeg; GG: Seoul, Mt. Aengmubong, Songchu, Mt. Dobong, Mt. Bughan, Mt. Yongmun; CB: Chupungnyeong; CN: Yuseong, Daejeon. JB: Igsan, Mt. Naejang; JN: Is. Daeheugsando, Is. Hongdo; GB: Mt. Palgong, Daegu, Is. Ulleungdo; GN: Mt. Jiri, Mt. Gaji; JJ: Seogwipo.

Distribution. Widely distributed in Palaearctic region.

Subfamily Conocephalinae Kirby, 1906

Genus *Conocephalus* Thunberg, 181511. *Conocephalus maculatus* (Le Guillou) 점박이썩새기

Xiphidium maculatum Le Guillou, 1841, Rev. et Magaz., 4: 294.

Xiphidium maculatum, Doi, 1932, J. Chosen Nat. Hist. Soc., 13: 37 (Baegbong, Mt. Samseong, N. Korea; Mt. Bughan).

Xiphidion maculatum, Doi, 1933, J. Chosen Nat. Hist. Soc., 15: 88 (Baegbong, N. Korea; Mt. Samseong, N. Korea; Mt. Bughan).

Conocephalus maculatus, Furukawa, 1942, Saisyu to Shiiku, 4 (2): 35 (Korea).

Body length, 22–25 mm. The land, this species is one of the tropical species. Main habitat is grass. The most abundant occurrence is in July, with univoltine in Korea.

Collected localities. JB: Mt. Naejang; JN: Is. Daeheugsando, Is. Hongdo; JJ: Seogwipo.

Distribution. Korea, Japan (Southern part) and widely distributed in oriend-tropical region.

12. *Conocephalus gladiatus* (Redtenbacher) 긴꼬리쌩새기

Xiphidium gladiatum Redtenbacher, 1891, Mono. d. Conoceph.,: 200 (Japan).

Xiphidium gladiatum, Doi, 1932, J. Chosen Nat. Hist. Soc., 13: 37 (Pyeongyang, Mt. Samseong, N. Korea; Siheung, Mt. Soyo, Hoeryongsa).

Xiphidion gladiatum, Doi, 1933, J. Chosen Nat. Hist. Soc., 15: 88 (Pyeongyang, Mt. Samseong, N. Korea; Siheung, Mt. Soyo, Hoeryongsa).

Conocephalus gladiatus, Furukawa, 1942, Saisyu to Shiiku, 4 (2): 35 (Korea).

Body length, about 20 mm. Length of wing is almost same as the body length. Macropterous form is sometimes appeared. The main habitat is grass land. The most abundant occurrence is in August–October, with univoltine in Korea.

Collected localities. GW: Sogeumgang, Mt. Palbong, Chuncheon; GG: Mt. Myeongji, Sanjeongho, Mt. Wangbang, Mt. Aengmubong, Mt. Cheonma, Songchu, Mt. Dobong, Paldang, Mt. Ungil; CB: Chupungryeong; CN: Yuseong, Daejeon. GB: Daegu; GN: Mt. Gaji, Mt. Gaya, Mt. Jiri.

Distribution. Korea, Japan (including Tsushima), S. Manchuria.

13. *Conocephalus chinensis* (Redtenbacher) 쌩새기

Xiphidium chinensis Redtenbacher, 1891, Mono. d. Conoceph.,: 195 (China).

Xiphidion longipenne De Haan, Doi, 1932, J. Chosen Nat. Hist. Soc., 13: 37 (Baegbong, N. Korea).

Xiphidion longipenne, Doi, 1933, J. Chosen Nat. Hist. Soc., 15: 88 (Baegbong).

Conocephalus chinensis, Furukawa, 1942, Saisyu to Shiiku, 4 (2): 35 (Korea).

Body length, about 18 mm. Much variable in size, sometimes body length of larger one is 8 mm longer than the short one. It has been known that there are two generations in the plain area, but one generation in the mountainous area.

Collected localities. GW: Sogeumgang, Yanggu, Chugog (near Chuncheon); GG: Mt. Myeongji, Mt. Aengmubong, Songchu, Mt. Yongmun, Mt. Cheonma; CN: Yuseong, Daejeon; JB: Jeonju, Mt. Naejang. GB: Mt. Cheonhwang.

Distribution. Korea, Japan, Manchuria, Amur.

14. *Conocephalus japonicus* (Redtenbacher) 좀씩새기

Xiphidium japonicum Redtenbacher, 1891, Mono. d. Conoceph.,: 211 (Japan).

Xiphidium japonicum, Doi, 1932, J. Chosen Nat. Hist. Soc., 13: 37 (Siheung, Mt. Soyo).

Xiphidion japonicum, Kamiyo, 1933, J. Chosen Nat. Hist. Soc., 15: 49 (Bulgusa, Gyeongju).

Conocephalus japonica, Cho, 1959, Hum. Scoi, Korea Univ., 4: 162–163 (Korea).

Body length, about 18 mm. Length of wing is shorter than body length. Main habitat is on grass in mountains. The most abundant occurrence is in September–October, with univoltine in Korea.

Collected localities. GW: Mt. Palbong; CB: Chupungnyeong.

Distribution. Korea, Japan, Taiwan, E. China, S. Manchuria.

Genus *Xiphidiopsis* Redtenbacher, 1891

15. *Xiphidiopsis exemptum* (Walker) 어리씩새기

Xiphidium exemptum Walker, 1869, Cat. Spec. Derm. Salt. Call. Brit. Mus.,: 274 (Corea).

Xiphidium sp., Doi, 1932, J. Chosen Nat. Hist. Soc., 13: 37 (Siheung; Mt. Soyo).

Xiphidiopsis suzukii Matsumura et Shiraki, Doi, 1933, J. Chosen Nat. Hist. Soc., 15: 88 (Siheung, N. Korea; Mt. Soyo).

Body length, about 22 mm. No detail for this species has been known. This species was first reported by Walker (1869) and then reported again as *Xiphidium* sp. by Doi (1932). It has been known to be endemic to Korea.

Collected localities. GG: Sanjeongho, Mt. Deogam; JB: Jeonju.

Distribution. Korea.

Subfamily Decticinae Kirby, 1906

Genus *Chizuella* Furukawa, 1950

16. *Chizuella bonniti* (Bolivar) 잔날개여치

Platypleis bonneti Bolivar, 1890, Anal. Hist. Nat.,: 326 (Hokkaido).

Metrioptera bonneti, Furukawa, 1930, Kontyu, 4 (2): 109 (Corea).

Chizuella bonneti, Furukawa, 1950, Ico. Ins. Japon.,: 40 (Korea).

Body length, 25–32 mm. Forewing is very short, about 5 mm. Main habitat is on grass with low humidity. The main occurrence is in June–September, with univoltine.

Collected localities. GW: Mt. Daeam, Mt. Seolag, Chugog, Mt. Bangdae, Mt. Gariwang; GG: Mt. Baegun, Mt. Gamag, Mt. Ungil, Mt. Hwaya; JB: Mt. Mai, Mt. Naejang; JN: Is. Jindo, Is. Geo-

mundo; GB: Mt. Gaya; Gampo; JJ: Mt. Halla, Is. Chujado.

Distribution. Korea, Japan (including Tsushima), Manchuria, E. Siberia.

Subfamily Bradyporinae Kirby, 1906

Genus *Deracantha* Waldheim, 1833

17. *Deracantha transversa* Uvarov 민충이

Deracantha transversa Uvarov, 1930. Ann. Mag. Hist., 10(5): 255–256 (Peiping).

Callimenus onos Pallas, Mori, 1929, J. Chosen Nat. Hist. Soc., 9:40 (Pyeonganbugdo; Pyeonganamdo; Hwanghaedo).

Deracantha onos, Mori 1933, J. Chosen Nat. Hist. Soc., 16: 55 (Pyeongannamdo; Hwanghaedo).

Deracantha transversa, Mori, 1935, Rep. First Sci. Exp. Manchoukuo, Sec. 5, Div. 1, Part 5, Art. 17: 7–9 (North West Korea).

Body length, 45–52 mm in male and 47 mm in female. The domestic distributional range of this species is mainly in northern part of Korean peninsula. It has not been found in S. Korea.

Collected localities. Mostly abundant in Pyeongan-do, Whangho-do, N. Korea.

Distribution. Korea (North only), N. China, S. Manchuria.

Subfamily Decticinae Kirby, 1906

Genus *Metrioptera* Wesmael, 1833

18. *Metrioptera engelhardti* Uvarov 애여치

Metrioptera engelhardti Uvarov, 1926, Ann. Mag. Nat. Hist., 9 (17): 281–282 (Russian Far East).

Metrioptera grisea Fabricius, Mori et Cho, 1939, J. Chosen Nat. Hist. Soc., 27: 4, pl. 1, fig. 1 (Mt. Chailbong).

Metrioptera japonica Bolivar, Cho, 1959, Hum. Sci. Korea Univ.,: 156–157 (Korea).

Body length, 20 mm. Macropterous form is sometimes over than 35 mm. Main habitat is on humid grass. The most abundant occurring period is June–August, with one generation a year in Korea.

Collected localities. GW: Mt. Seolag, Mt. Gariwang, Panburi.

Distribution. Korea, Japan (including Tsushima), Manchuria, Siberia.

19. *Meterioptera brachyptera* (Linnaeus) 꼬마여치

Gryllus brachyptera Linnaeus. 1761, Fauna Suec., 2: 237, n. 868 (Sweden).

Metrioptera brachyptera, Uvarov, 1931, Bol. Soc. Esp. Hist. Nat., 31: 674 (Mt. Baegdu, Korea).

Body length, about 15 mm. Ground colour of body is brown. No detail has been known on this

species in Korea.

Collected localities. GW: Mt. Seolag, Mt. Odae, Mt. Gariwang.

Distribution. Widely distributed throughout the Palaearctic region.

20. *Metrioptera ussuriانا* Uvarov 우수리여치

Metrioptera ussuriانا Uvarov, 1926, Ann. Mag. Nat. Hist. 9 (17): 282–283 (Primorskaya).

Metrioptera ussuriانا, Bey-bienko, 1931, Bol. Soc. Esp. Hist. Nat., 31: 674 (Mt. Baegdu, N. Korea).

Metrioptera koreana Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 54–55, 57, f. 3, (Sangsanbong, Pyeongyang, Nanam, N. Korea).

Body length, 15–25 mm. Ground colour of body is brown. There are remarkable variations in shape and length of wing. Main habitat is in mountainous area, but no detail has been known on this species in Korea.

Collected localities. GW: Mt. Daeam, Mt. Hyangnobong, Mt. Seolag, Mt. Odae; GN: Mt. Jiri.

Distribution. Korea, Ussuri.

Genus *Atranticus* Scudder, 1894

21. *Atranticus chinensis* Uvarov 좀날개여치

Atranticus chinensis Uvarov, 1923, Trans. Ent. Soc. London,: 512 (Shense).

Atranticus brunneri Pylnov, Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 54 (Musanyyeong).

Atranticus jeholensis Mori, Mori et Cho, 1940, List Annim, Mt. Kongo,: 20 (Mt. Geumgang).

Body length, 26 mm. No detail has been known on this species in Korea

Collected localities. GW: Mt. Godae, Mt. Seolag, Mt. Odae, Mt. Bangdae, Chugog, Mt. Palbong, Chuncheon; GG: Mt. Baegun, Mt. Ungil, Is. Baegnyeongdo.

Distribution. Korea, Ussuri, Manchuria.

Genus *Paratlanticus* Ramme, 1939

22. *Paratlanticus ussuriensis* (Uvarov) 갈색여치

Atlanticus ussuriensis Uvarov, 1926, Ann. Mag. Nat. Hist., 9 (17): 273, 291 (Russian Far East).

Atlanticus ussuriensis, Beybienko, 1931, Bol. Soc. Esp. Hist. Nat., 31: 673 (Mt. Baegdu N. Korea).

Clinopleura sp. Doi, 1932, J. Chosen Nat. Hist. Soc., 13: 38 (Baegbong, Mt. Samseong, Musanyyeong, N. Korea; Mt. Seolbong, Mt. Soyo).

Gampsocleis inflata Uvarov, Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 53 (Gwangju, Jeonnam, Mt. Naejang).

Paratlanticus palgongensis Rentz et Miller, 1971, Ent. News, 82: 268–270 (Mt. Palgong).

Paratlanticus ussuriensis, Rentz et Miller, 1971, Ent. News, 82: 270 (Mt. Baegdu N. Korea).

Body length, 25–32 mm. Ground colour of body is brown. A remarkable variation within individuals is found in different localities. Generally the northern part one is smaller with short pronotum than individuals collected in the southern part. *P. tsushimensis* Yamasaki which was described from Isl. Tsushima and preserved in Natural History Museum of Osaka, seems to be conspecific to this species, in comparison when I visited there recently.

Collected localities. GW: Mt. Hyangnobong, Mt. Seolag, Mt. Chiag, Mt. Gyebang, Mt. Bangdae, Mt. Gariwang, Chugog, Mt. Taebaeg; GG: Mt. Baegun, Mt. Soyo, Mt. Ungil; CB: Mt. Weolag. JN: Haenam, Is. Jindo; GB: Mt. Juwang; GN: Mt. Muhag, Mt. Jiri, Mt. Ogyeobong, Is. Geojedo.

Distribution. Korea, Japan (Tsushima), Manchuria, Ussuri.

Genus *Gampsocleis* Fieber, 1852

23. *Gampsocleis buergeri* (De Haan) 여치

Decticus buergeri De Haan, 1842, Bijdr. Orth., L 214 (Japonia).

Decticus obscurus Walker, 1869, Cat. Spec. Derm. Salt. Coll. Brit. Mus.,: 261–262 (Core).

Gampsocleis micado Burr, Okamoto, 1924, Bull. Agr. Exp. Sta. Chosen 1 (2): 57 (Isl. Jeju).

Gampsocleis buergeri, Okamoto, 1924, Bull. Agr. Exp. Sta. Chosen 1 (2): 57 (Isl. Jeju).

Gampsocleis sedakovi obscurus, Furukawa, 1930, Kontyu, 4 (2): 107–108 (Corea).

Gampsocleis ussuriensis Adelung, Furukawa, 1930, Kontyu, 4 (2): 108–109 (Corea).

Gampsocleis obscura, Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 53 (Gaeseong, Cheongjin, Sineuiju, N. Korea, Busan, Pohang, Seoul, Mt. Soyo,).

Gampsocleis obscura hokusenensis Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 53 (Mt. Baegdu, Gabsan, Bujeonryeong, N. Korea).

Gampsocleis gratiosa Brunner, Wu, 1935, Cat. Ins. Sinensium, I: 88–89 (Korea).

Body length, 35–60 mm. There is a big difference in size depending on collecting areas. Population of the southern part is much larger than that of the northern part, and the length of wing is also longer than the northern one. The specimens collected in Jeju Island is especially larger than any others, thus it is often misidentified as *G. ussuriensis* Adelung. The most abundant occurring period is June–August, with one generation a year in Korea.

Collected localities. GW: Mt. Seolag, Mt. Odea, Chunseong, Mt. Godae, Mt. Bangdae, Chuncheon, Yanggu; GG: Gwangneung, Paldang, Mt. Ungil; JN: Is. Sangjodo; GB: Mt. Juwang, Mt. Hyongseong; JJ: Mt. Halla, Seogwipo, Is. Chujado.

Distribution. Korea, Japan (including Tsushima), N. China, Manchuria, Siberia.

24. *Gampsocleis ussuriensis* Adelung 긴날개여치

Gampsocleis ussuriensis Adelung, 1910, Hor. Soc. Ent. Ross., 39: 351–352 (Ussuri).

Gampsocleis ussuriensis, Mori, 1935, Rep, First Sci. Exp. Manchoukuo, Sec. 5, Div. 1, part 5, Atr. 17: 4-5 (Korea).

Body length, 30-40 mm. Length of wing is longer than that of body. Main habitats is on bush or grass. The most abundant occurrence is in June-August.

Collected localities. GW: Mt. Baegun; GG: Is. Seonmido; Is. Uldo.

Distribution. Korea, Japan(Hokkaido), Ussuri, Siberia, Manchuria.

Subfamily Tettigoniinae Kirby, 1906

Genus *Tettigonia* Linnaeus, 1758

25. *Tettigonia viridissima* (Linnaeus) 중베짱이

Gryllus Tettigonia viridissima Linnaeus, 1758, Syst. Nat., 10: 430 (Europe).

Tettigonia viridissima, Uvarov, 1923, Trans. Ent. Soc. London, : 495 (Seoul).

Tettigonia orientalis Uvarov, Doi, 1936, J. Chosen Nat. Hist. Soc., 21: 106 (Euijeongbu, near Seoul).

Tettigonia dolichoptera Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 52-53. fig. a (Sineuiju, n. Korea).

Body length, 35-40 mm. There are remarkable variations in the length of wing, and sometimes wing long enough over the body. The larger one has been treated as *T. dolichoptera* Mori, thus a further study for the complexity of these two species is needed. I tentatively place the latter a synonym of this species. Sometimes this species has been confused with *T. cantans* (Fuessly).

Collected localities. GW: Chugog, Inje, Mt. Bangdae, Gucheondong; GG: Seoul, Geumgang, Is. Ganghwa, Is. Deogjeogdo; GB: Mt. Bonghwang.

Distribution. Throughout the Palaearctic region including Korea.

26. *Tettigonia cantans* (Fuessly) 북방베짱이(改稱)

Gryllus cantans Fuessly, 1775, Verz. Schweiz. Ins., : 23, n. 439, taf. 1, fig. 5a, b (Schweiz).

Tettigonia viridissima Linnaeus, Furukawa, 1930, Kontyu, 4 (2): 105-106 (Corea).

Tettigonia cantans Mori, 1933, J. Chosen Nat. Hist. Soc., 16: 52 (Gwangju, Jeonnam, Cheongjin).

Body length, 26-35 mm. There are often confusions in identification of this species due to remarkable variations in shape and in length of wing. Furukawa (1930) also misidentified this species as *T. viridissima* and most of recent authors followed him. Main habitats are on bush and grass. Univoltine with main occurring period of June to September.

Collected localities. GW: Mt. Hyangnobong, Mt. Daeam, Mt. Seolag, Mt. Gariwang, Mt. Bangdae, Mt. Odae, Osaeg, Sogeumgang, Mt. Gyebang; GG: Mt. Gamag, Mt. Baegun, Gwangneung, Mt. Ungil; CN: Mt. Gagho. JN: Is. Wando; GB: Mt. Sobaeg, Mt. Palgong; GN: Mt. Jiri; JJ: Jeju, Seogwipo.

Distribution. Throughout Palaearctic region.

REFERENCES

- Bey-Bienko, G. 1931. On some Orthoptera from North Korea, Bol. Soc. Esp. Hist. Nat., 31: 673–678.
- Bey-Bienko, G. 1954. Tettigoniidae Phaneropterinae, Fauna of the U.S.S.R., Orthoptera, 2 (2): 1–381.
- Cho, B. 1959. A manual of the Orthoptera of Korea, Hum. Sci. Korea Univ., 4: 31–198.
- Doi, H. 1931. Miscellaneous note on insects, J. Chosen Nat. Hist. Soc., 13: 30–49.
- Doi, H. 1933. Miscellaneous note on insects, 3, J. Chosen Nat. Hist. Soc., 15: 85–96.
- Doi, H. 1934. On the female of *Pseudorhynchus japonicus* Shiraki, Mushi, 7 (2): 124–125.
- Doi, H. 1936. Miscellaneous note on insects, 7, J. Chosen Nat. Hist. Soc., 21: 102–108.
- Furukawa, H. 1930. Miscellaneous on Japanese Orthoptera (1), Kontyu, 4 (2): 99–110.
- Furukawa, H. 1950. Iconographia Insectorum Japonicorum, Tokyo: 1–1737.
- Hurakawa, H. 1942. Insects of shyakujii (in Japanese), Saisyn to Shiiku, 4 (2): 35–36.
- Kamijo, N. 1933. On a collection of insects from North Keisho-Do, Korea, 2, J. Chosen Nat. Hist. Soc., 15: 46–63.
- Matsumura et Shiraki, 1908. J. Coll. Agr. Johoku Imp. Univ., 3 (1): 23–24.
- Mori, T. 1929. “Kobaneohkirigiris”, J. Chosen Nat. Hist. Soc., 9: 40 (in Japanese).
- Mori, T. 1933. The Korean Tettigoniidae, J. Chosen Nat. Hist. Soc., 16: 50–56.
- Mori, T. 1935. Insects of Jehol, I. Rep. First Sci. Exp. Manchoukuo, Sec. 5, Div. 1, Part 5, Atr, 17: 1–7.
- Mori, T. et Cho. F. 1939. A collected list of Mt. Cha-Il-Bong (in Japanese), J. Chosen Nat. Hist. Soc., 27: 4.
- Mori, T. et Cho. F. 1940. List of animals, Mt. Kongo, 1–25.
- Nagaoka, N. 1938. Insect-fauna of Mt. Myoko in Western Korea, The Ent. World, Tokyo, 5 (46): 22–29.
- Okamoto, H. 1924. The Insect fauna of Quelpart Island, Bull. Agr. Exp. Sta., 1 (2): 47–233.
- Rentz, D. et Miller, R. 1971. Ecological and faunistic notes on a collection of Orthoptera from South Korea, Ent. News, 82: 253–273.
- Uvarov, B. P. 1923. Notes on the Orthoptera in the British Museum, 3, Trans. Ent. Soc. London, 492–537.
- Uvarov, B. P. 1926. Some Orthoptera from the Russian Far East, Ann. Mag. Nat. Hist, 9 (17): 273–291.
- Walker, F. 1869. Catalogue of the specimens of Dermaptera Saltatoria and supplement to the Blattaria in the collection of the British Museum, 2: 157–423.
- Wu. 1935. Catalogus Insectorum Sinensium, 1: 15–214.

한국産 여치科의 分類學的 整理

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한국産 여치科는 현재까지 32種으로 알려져 왔으나 그들 상당수의 種이 이중으로 기록되어 왔거나 유효하지 않은 학명을 사용했음으로써 학명사용상 혼동이 야기되어 왔었다. 이에 저자는 그들의 初記錄들을 조사함으로써 이들 학명들을 재정리하여 총 26種으로 재분류하였으며 *Metrioptera koreana* Mori, *Paratlanticus palgongensis* Rentz et Miller, 그리고 *Tettigonia dolicoptera* Mori 등 3種은 새로운 synonym으로 정리하였다.

검색어 : 분류, 메뚜기목, 여치과